



U.S. Department of Energy

National Energy Technology Laboratory



January 25, 2005

MEMORANDUM FOR EMS FILE

FROM: JAN K. WACHTER /s/ Jan K. Wachter
EMS REPRESENTATIVE

SUBJECT: Management Review Team Meeting

This memorandum is to document the Management Review Team meeting of January 21, 2005. These notes conform to NETL Procedure 450.1-6A, Environmental Aspects, Objectives, Targets, and Management Plans, which contain the requirements for documenting the Management Review Team Meetings, paragraph 9.f.8. Copies of these notes are provided to the members of the Management Review Team, will be posted to the EMS Roadmap on the Intranet, and the original will be filed with the EMS records.

ATTENDEES: Rita A. Bajura, Director
Carl Bauer, Deputy Director
Tom Torkos, Office Director, Office of Business and Logistics
Larry Headley, Office Director, Office of Science and Technology
Jan K. Wachter, EMS Representative
Dan McCollum, Quality Manager

ISO Six Month Surveillance Audit

NETL successfully passed the second six month surveillance audit conducted on October 26-28, 2004. The only finding from the audit was one opportunity for improvement. Attachment 1 is a summary of the audit finding from surveillance audit #2 and NETL's response to the finding. The auditor noted evidence of continued improvement within NETL's EMS, especially in the areas of employee awareness and internal auditing.

The next six month surveillance audit is tentatively scheduled for late March 2005.

The fourth surveillance audit will require us to meet the new ISO 14001:2004 standard. The changes in to the standard are very minor and we do not expect any additional costs for meeting the new requirements. The registrar contract will need to be modified to include this change.

Status of Environmental Management Plans

The implementation status of the Environmental Management Plans (EMPs) is shown in Attachment 2. Some FY2004 targets have not been met and there seems to be waning enthusiasm regarding development and implementation of EMPs.

Internal Audits

Internal Audit #12 was conducted in August 2004 and focused on four areas:

- EMPs
- Closed Findings
- NETL Procedures and Orders
- Selected Elements of the Annual Site Environmental Report.

The audit resulted in four Corrective Actions and five Opportunities for Improvement.

Non-conformities from the audits are:

- The Facility SARS procedure is not being followed consistently. Permits are not being approved in timely manner.
- A SARS package for the Analytical Laboratory does not exist – this was caused when the laboratory was moved from one building to another and moved under new supervision.
- Historical and obsolete documents are not being properly marked – this was an ongoing corrective action from surveillance audit #1.

Note: The SARS findings are of concern because this process continues to generate findings related to failure to follow procedural requirements. Management support is needed to stress the importance of adherence to the SARS process and to ensure that appropriate action results when the SARS process is not being followed.

Change in Number of Audits: Beginning in 2005, internal audits will be reduced annually from four to three. This reduction demonstrates that fewer serious issues are being found and the need for four quarterly audits is no longer justified. This is another indicator that the program continues to mature.

A summary of all audits with open findings is shown in Attachment 3.

Revised Environmental Policy

The revised environmental policy has been approved and issued. New posters and employee badges have been deployed at the PGH and MGN sites.

Requested Actions by the Management Review Team (from previous meeting)

1. Regarding alternate fuel usage: ensure that users of government vehicles know how to have the vehicles refueled with alternate fuels to help encourage their use – a sticker in the vehicle or some other similar method was recommended.

Response: Alternate fueling stations for ethanol have been installed at both sites which will allow for more convenient fueling of the flexible fueled vehicles. A computer-based training (CBT) module is also being prepared to inform employees

of the importance of using alternate fuels in government vehicles. Also, we are working to develop stickers for the cars that will correspond to the release of the CBT.

2. Regarding the “new” PRISM logo: The MRT wants to remain as close as possible to the original.

P – Pollution Prevention.

R – Regulatory Compliance.

I - will be changed to “Improve Continually,” rather than “Improve Continuously” in order to be more consistent with the ISO-14001 standard.

S – Safety Analysis and Review System.

M – will be changed to “Minimize Waste through Reuse, Recycling and Resource Conservation” – this is an expansion of the previous version.

Also, the portion of the new environmental policy related to communications needs to be summarized and added to the badge before it is distributed.

Response: The above changes were made and issued with the EMS policy.

3. Regarding ensuring Facility SARS construction packages are completed before construction begins: Tom Torkos will stress to the Site Operations Division the need for SARS packages to be completed before construction begins.

Response: This has been stressed to the Site Operations Division and is being enforced through OIBO’s Assistance and Acquisition Division.

4. Regarding the Opportunity for Improvement, Storage of Materials Outside: the MRT questioned why there is so much equipment or excess materials that is remaining on site. Need to check with the property managers to see if there is a way to get rid of this material/equipment if it is not needed. The Director is very concerned with this issue.

Response: Excess materials have been reviewed and the Federal Property Manager is reducing the inventory as much as possible.

Confirmation of the Existing Targets and Objectives

Attachment 2 contains the proposed list of objectives and targets for 2005.

Note: DOE has established a working group to revise the P2E2 goals (Pollution Prevention and Energy Efficiency) for 2006 to 2010. Many of the existing EMS goals (tiered from Executive Orders) expire in 2005. These deal with the waste reduction and recycling, buying green, energy efficiency, green energy purchase, retrofit of chillers/elimination of greenhouse gas emissions, and alternate fuel usage. This working group results will probably be driving the targets for 8 of our 10 aspects.

New Action requests by the Management Review Team

Approval of 2005 Objectives/Targets: The MRT approved the targets for 2005 and requested that a more definitive target be established for 10.1, Non-Industrial Land Use, based on the recommendation made last year.

Internal Audits: The MRT agreed that internal audits should be reduced from four to three audits per year. They further recommended that given concerns with SARS packages that a separate SARS Audit be conducted to continue to ensure that the process is being followed and that documentation is accurate.

Safeguards and Security Interface: The MRT request that the interface with the Integrated Safeguards and Security program with the ES&H Program be evaluated and documented per the meeting that was held on January 11, 2005 with the NETL Director. Much work has been done on ES&H program documentation and it should be integrated as much as possible with the Safeguards and Security Program.

Corrective Action Tracking: The MRT request that the Assessment Input Information System be upgraded to make is more user friendly. The EMS Representative noted that work has begun on making upgrades to AIIS, but were put on hold during the recent new contract awards. A Task is being put in place to address the needed upgrades.

The “Five Questions”

- Question 1: Does NETL’s EMS continue to be suitable, adequate, and effective to address NETL’s environmental aspects? MRT: Yes
- Question 2: Was the information presented adequate to carry out this evaluation? MRT: Yes
- Question 3: Does the EMS policy need to be changed? MRT: No
- Question 4: Are the objectives and targets suitable to address the environmental aspects identified? MRT: Yes
- Question 5: Do the results of audit findings indicate or other circumstances warrant any changes to the EMS? MRT: No.

Attachment 1: Results of First Six Month Surveillance Audit

The second six-month ISO 14001 Surveillance Audit was successfully completed on October 28, 2004 with a recommendation by the lead auditor, Ken Clayman, NSF International Strategic Registrations, that NETL continue to maintain certification to the ISO 14001 standard.

Mr. Clayman identified one opportunity for improvement associated with the identification of monitoring and measurement information on the Screening Analysis Questionnaire (NETL Form 450.1-4) in that the information was not consistently being identified in all SARS packages (and vice versa). A formal response to an OFI is not required; however, NETL provide a response to the auditor who accepted the plan of action. The response can be found below.

In addition to these results, the auditor noted the following strengths in NETL's ISO 14001 program:

- *The single greatest improvement that was observed from this audit was the awareness by NETL personnel of the EMS and its relationship to the individuals' jobs and responsibilities. Everyone that was interviewed was able to provide very good responses relative to existence of environmental objectives and how they are helping to achieve these goals as part of their work.*
- *The EMS Auditing program continues to be a significant underlying strength to the system- the evidence reviewed indicates that the process is well understood and effectively implemented by NETL auditors. It also thorough and robust in the approach that is used.*

Next Surveillance Audit

The third six-month surveillance audit is tentatively scheduled for late March 2005. As with the previous two surveillance audits, Mr. Clayman will return to both sites to examine how NETL has responded to the findings from the second surveillance audit and to find objective evidence of improvements to the EMS.

Surveillance audits will continue through surveillance audit #4 during the fall of 2005. In the Spring of 2006, NETL must apply for renewal of the ISO 14001 certification and contract with either NSF or another registrar for these services. This will necessitate a change to the NSF contract because five surveillance audits were expected before the need to apply for recertification.

Note: At the time of recertification, NETL will need to comply with the newest version of ISO 14001:2004. We are presently investigating what changes are needed to bring the EMS into compliance with the newest version of the standard.

Issue/Request: We need the MRT to continue to stress to employees the importance of adhering to procedures such as SARS, the EMPs, etc. If we cannot prove that we are implementing our own NETL requirements, then we will be unable to maintain certification.

Attachment 1: Results of First Six Month Surveillance Audit

Response to Surveillance Audit #2 Findings

CAR Number: NETL-SA2-01

Opportunity for Improvement: NETL Procedure 450.4-15A requires that monitoring/measurement information and requirements are supposed to be identified and documented on ISO 14001 Screening Analysis Questionnaire forms (F450.1-4, a required part of the SARS packages). However, we observed that this information was included inconsistently amongst packages reviewed. There appears to be an opportunity for improvement with regard to reemphasizing this need and NETL requirement, as well as to further educate appropriate personnel on the meaning of EMS monitoring and measurement. (ISO 14001:1996, Clause 4.5.1)

1) ROOT CAUSE ANALYSIS BY COMPANY: Procedure is not clear as to what monitoring and measurement information should be contained on Form 450.1-4. Only EMS-related monitoring and measurement information is to be contained on this form.

2) CORRECTIVE ACTION BY COMPANY:

Corrective Action NETL-SA2-01-1: Procedure 450.4-15, Monitoring and Measuring Key Environmental Characteristics, will be modified to indicate that only EMS-related monitoring and measurement information is to be included on Form 450.1-4, ISO 14001 Screening Analysis Questionnaire. (RP: Rodger Dotson) [AIIS: 350-2004-0116].

Corrective Action NETL-SA2-01-2: Form 450.1-4, ISO 14001 Screening Analysis Questionnaire, will be modified to provide instructions that only monitoring and measurement information that is specifically related to EMS information shall be included on the form. (RP: Rodger Dotson). [AIIS: 350-2004-0117]

Corrective Action NETL-SA2-01-3: Form 450.1-4, ISO 14001 Screening Analysis Questionnaire, in all SARS packages shall be reviewed to ensure that they only contain EMS-related monitoring and measurement information. (RP: Dan McCollum). [AIIS: 350-2004-0118]

3) PREVENTIVE ACTION BY COMPANY:

Preventive Action NETL-SA2-01-4: Procedure 450.4-16, Calibration and Maintenance of Instruments that Monitor and Measure Key Environmental Characteristics, will be modified to ensure that all EMS-related monitoring and measurement equipment is entered in the NETL calibration system database and marked as EMS-related equipment. (RP: Rodger Dotson). [AIIS: 350-2004-0119]

Preventive Action NETL-SA2-01-5: Form 450.1-4, ISO 14001 Screening Analysis Questionnaire, in all SARS packages shall be reviewed to ensure that all monitoring and measurement equipment contained on the forms is also in the NETL calibration system database. (RP: Dan McCollum). [AIIS: 350-2004-0120]

Attachment 1: Results of First Six Month Surveillance Audit

Preventive Action NETL SA2-01-6: Project and Support Operations Responsible Persons, Project Quality Assurance Engineers, and ES&H Representatives shall be reminded that all EMS-related monitoring and measurement information and only EMS-related information shall be documented on Form 450.1-1, ISO 14001 Screening Analysis Questionnaire, and that calibration information regarding the equipment related to the monitoring and measurement must be entered into the NETL calibration system database. (RP: Dan McCollum). [AIIS: 350-2004-0121]

Preventive Action NETL SA2-01-7: A computer-based training module will be developed and issued to provide training and education related to monitoring and measurement. (RP: Janice Bell). [AIIS: 350-2004-0122]

Attachment 2: Status of Environmental Management Plans and Proposed 2005 Targets

The status of each of the 21 Environmental Management Plans (EMPs) is shown in the table below. The 21 plans correspond to the 21 objectives that were approved by the Management Review Team on January 6, 2004. Also included in the table are the proposed targets for 2005 which require approval by the Management Review Team.

Attachment 2: Status of 2004 Environmental Management Plans

EMP	Objective/Target	2002 Target	2003 Target	2004 Target	2005 Target	Status
		Metric Achieved	Metric Achieved	Metric Achieved		
Aspect 1 – Waste Generation, Management, and Disposal Practices						
1.1 Non-Hazardous Waste Generation	75% reduction by 2005 and 80% reduction by 2010 based on 1993 baseline (641 tons)	281 tons (56% reduction)	241 tons (62% reduction)	200 tons (69% reduction)	160 tons (75% reduction)	2004 target was missed - in danger of not meeting FY2005 target.
		210 tons (67% reduction)	220 tons (66% reduction)	238 tons (63% reduction)		
1.2 Hazardous Waste Generation	90% reduction by 2005, using a 1993 baseline (18.46 tons)	6.00 tons (67% reduction)	4.62 tons (75% reduction)	3.23 tons (82.5% reduction)	1.85 tons (90% reduction)	2004 target almost achieved, but may be difficult to achieve 2005 target of 90% reduction.\ Clean out of B-141 caused the increase.
		1.51 tons (92% reduction)	3.01 tons (83.7% reduction)	3.32 (82% reduction)		
1.3 Recycling	Increase recycling of sanitary waste streams to 45% by 2005 and 50% by 2010	34%	37%	41%	45%	Markets for recycling are drying up.
		51%	53%	46.6%		
1.4 Construction Waste	To study the possibility of recycling construction wastes	Report	Report	Modify Construction Contracts, Processes and Language	N/A	All targets achieved, no future targets are needed. No major demolition is planned for 2005. Will continue to use the process to identify opportunities for recycling construction waste.
		Report not completed	Report not completed	Language included for major construction activities		
Aspect 2 – Energy and Fuel Use						
2.1 Energy Conservation	Reduce energy consumption through life-cycle cost effective measures	Report	Submit B-26 Retrofit	Complete B26 Retrofit	Project to be approved by FEMP	The project is being submitted to FEMP for approval and will be explained in the EMP during the second quarter of FY2005.
		Report delivered	Approved by FEMP	Completed		

Attachment 2: Status of 2004 Environmental Management Plans

EMP	Objective/Target	2002 Target	2003 Target	2004 Target	2005 Target	Status
		Metric Achieved	Metric Achieved	Metric Achieved		
2.2 Energy Use	Reduce energy use per square foot in laboratory and industrial (mixed-use) facilities by 20% by 2005, using a 1990 baseline (369 x 10 ³ BTU per square foot)	310 x 10 ³ BTU/ft ² (16% reduction)	306 x 10 ³ BTU/ft ² (17% reduction)	300 X 10 ³ BTU/ft ² (19% reduction)	295 X 10³ BTU/ft² (20% reduction)	
		247 x 10 ³ BTU/ft ² (33% reduction)	274 x 10 ³ BTU/ft ² (25.7% reduction)	233 x 10 ³ BTU/ft ² (36.8% reduction)		
2.3 Annual Petroleum Fuel Consumption	Reduce annual petroleum consumption (adjusted for mileage) for NETL's vehicular fleet by 20% by 2005 using 2001 baseline (adjusted for mileage) of 0.0367 gallons per mile	.0349 gallons per mile (5% reduction)	.0330 gallons per mile (10% reduction)	.0312 gallons per mile (15% reduction)	0.0294 gallons per mile (20% reduction)	Target was not met – alternate fueling stations have been installed at both sites, except for the CNG station in MGN which needs an additional 30K to complete.
		.0391 gallons per mile (6% increase)	0.0416 gallons per mile (13% increase)	0.0410 gallons per mile (10% increase)		
2.4 Usage Rate of Alternative Fuels	Increase usage rate of alternative fuels to 75% by 2005 and 90% by 2010 in areas where alternative fuel infrastructure is available. Baseline in 2001 is 13.7%	30%	45%	65%	75%	Target was not met. See note on 2.3.
		16.6%	18.1%	28%		
2.5 Energy and Environmental Leadership in New Building Design and	By incorporating sustainable design features and following Executive Order 13123 and DOE Order 430.2A requirements, NETL will	----	Progress Report	Complete energy efficient designs for the two buildings	Continue designs for two new buildings	

Attachment 2: Status of 2004 Environmental Management Plans

EMP	Objective/Target	2002 Target	2003 Target	2004 Target	2005 Target	Status
		Metric Achieved	Metric Achieved	Metric Achieved		
Construction	attain Leadership in Environmental and Energy Design (LEED) certification and Energy Star designation for its new major building construction.	----	Progress Report delivered			
Aspect 3 – Hazardous Materials Procurement, Consumption, and Storage						
3.1 Chemical Inventory	Reduce the chemical inventory (number of containers) by 20% by 2005 based on 2002 baseline (6600 containers)	6,600 containers	6,138 containers (7% reduction)	5,676 containers (14% reduction)	5,280 containers (20% reduction)	
		6,600 containers (baseline)	4,801 containers (27% reduction)	4,986 containers (24% reduction)		
Aspect 4 – Industrial Wastewater Treatment Plant Operations						
4.1 Notices of Violation (NOVs)	To reduce the number of NOV's issued	2	1	0	0	Target was missed, two NOV's issued (5/24/04 & 8/10/04 for free cyanide)
		1	3	2		
Aspect 5 – Air Emissions						
5.1 Large Chillers Using CFC's	By 2005, retrofit or replace 100% of chillers greater than 150 tons of cooling capacity and manufactured before 1984 and use Class	Zero units to be replaced in 2002	Zero units to be replaced in 2003	Zero units to be replaced in 2004	Remove all Class 1 R-11 CFCs from the site (~700 lbs)	Target was met in 2004. 2-167 ton CFC free chillers have been purchased and installed in the newly constructed roof penthouse

Attachment 2: Status of 2004 Environmental Management Plans

EMP	Objective/Target	2002 Target Metric Achieved	2003 Target Metric Achieved	2004 Target Metric Achieved	2005 Target	Status
	1 refrigerants (Baseline number of chillers fitting this category = 2)	0	0	2 units removed		of Bldg. 94. Electrical and Mechanical rough in work is continuing and will be completed prior to the cooling season March/April 2005. Two 225 ton Class I chillers have been disconnected and not in service. The disposition of the reclaimed and stored refrigerant is being reviewed by ES&H Division for appropriated DOE/EPA/DOD disposal mechanism which should be completed during the 2 nd quarter of FY 2005.
5.2 Class 1 Refrigerants	Eliminate use of Class I refrigerants by year 2010, to the extent economically practicable, and to the extent that safer alternatives are available (inventory = 190 lbs)	190 lbs	166 lbs	142 lbs	118 lbs	Target was missed by one pound.
		190 lbs (baseline)	117 lbs	143 lbs		
5.3 Greenhouse Gases	Reduce greenhouse gas emissions attributed to facility use through life-cycle cost effective measures by 25% by 2005 and 30% by 2010, using 1990 as a baseline (67.4 million lbs)	53.9 million lbs (20% reduction)	51.7 million lbs (22% reduction)	51.7 million lbs (24% reduction)	50.6 million lbs (25% reduction)	Target missed by less than 2%. NETL will achieve over 25% in FY-2005 due to use of Landfill gas as heating source
		58.9 million lbs (13% reduction)	58.1 million lbs (13.8% reduction)	52.1 million lbs (22.7% reduction)		
5.4 Alternate Fueled Vehicles	Acquire at least 75% of light-duty vehicles as alternative fueled vehicles by 2005 and 90% by 2010	75%	75%	75%	75%	
		82%	100%	100%		

Attachment 2: Status of 2004 Environmental Management Plans

EMP	Objective/Target	2002 Target	2003 Target	2004 Target	2005 Target	Status
		Metric Achieved	Metric Achieved	Metric Achieved		
5.5 Emissions of Toxic Release Inventory (TRI) Chemicals	To reduce emissions of chemicals on the TRI List by 20% by 2005 using 1997 as baseline (3,850 lbs)	3,369 lbs (12.5% reduction)	3,273 lbs (15% reduction)	3,176 lbs (17.5% reduction)	3,080 lbs (20% reduction)	Largely due to the reduction in R&D activities, particularly the larger unites like the 500# Unit
		3,365 lbs (13% reduction)	2053 lbs (46.7% reduction)	1,465 lbs (66.2% reduction)		
5.6 VOC Emissions	Reduce VOC emissions by 50% by 2005 using 2002 baseline (42 lbs)	42 lbs released to atmosphere	35 lbs released to atmosphere (17% reduction)	28 lbs released to atmosphere (34% reduction)	21 lbs released to the atmosphere (50% reduction)	
		42 lbs (baseline)	35 lbs (17 % decrease)	24 lbs (57% reduction)		
Aspect 6 – Toxic Chemicals and Energy Releases						
6.1 Chemical Handling Facility	To improve the way the CHF stores and handles chemicals	Construction Activities	Preliminary Design	Construction complete	Complete all construction	2004 target was missed.
		None completed	Completed design	75% of construction complete		
Aspect 7 – Surface Water and Storm Water Discharge						
7.1 Water Discharge	To better understand the impacts of NETL and nearby off-site activities on surface water/storm water resources	Report	Report	N/A	Ensure SARS process considers surface water for construction activities	No target for 2004. 2 ORPS recordable were related to surface water. Clean out dikes for the alternate fueling stations.
		Report	Report	N/A		

Attachment 2: Status of 2004 Environmental Management Plans

EMP	Objective/Target	2002 Target Metric Achieved	2003 Target Metric Achieved	2004 Target Metric Achieved	2005 Target	Status
Aspect 8 – Green Purchasing						
8.1 Buying Green	Increase NETL storeroom purchases of items in EPA-designated categories to 100%	100%	100%	100%	100%	
		99.4%	100%	100%		
8.2 Buying Green	Determine the baseline for potential “green” purchases made with credit cards	N/A	N/A	Determine baseline	Implement reporting of credit card purchases	2004 target was missed; however, changes were made to SPS to require a justification if a green purchase was not being made and was available.
		N/A	N/A	Baseline not established		
Aspect 9 – Offsite Noise Generated Onsite						
9.1 Off-site Noise	Using 2002 as baseline year, reduce the no. of noise-related (valid) complaints from neighbors and the no. of demonstrated exceedences of local noise ordinances due to normal site activities based on monitoring activities	0 complaints and exceedences	0	N/A	N/A	Zero complaints were received.
		0 complaints and exceedences (baseline)	0	0		
Aspect 10 – Non-Industrial Land Use						
10.1 Land Use	To conserve and enhance NETL's non-industrial lands	Report	Report	Implement 2 Recommendations from the Non-Industrial Land Use Committee	Implement 2 Recommendations from the Non-Industrial Land Use Committee	Target missed. Committee submitted 4 recommendations, but none were implemented because of a lack of funds.
		Report delivered	Report delivered	Implementation did not occur.		

Attachment 2: Status of 2004 Environmental Management Plans

Attachment 3: Summary of Audit Findings/Corrective Actions

There are 67 open findings related to ISO 14001/EMS. The following is the status of audits with open findings. The shaded lines indicate external audits such as the registration audit and the six month surveillance audits conducted by the registrar. The **bold** indicates audits conducted since the last Management Review Team Meeting, July 27, 2004.

Audit Title/Date	Number of Findings Complete Open	Summary
Internal Audit #8 July 31 – August 14, 2003	81 78 complete 3 open/pending	Focus: Internal EMS and ES&H procedures, first time that internal procedures have been audited so many of the findings dealt with out-of-date procedures or procedures that were not being followed.
Internal Audit #11 May 12-May 26, 2004	15 8 complete 7 open/pending	Focus: The Audit focused on four areas: Environmental Management Plans, Closed Findings, NETL Procedures and Orders, selected SARS in the Office of Science and Technology, and the Management Review Team members. Results: Six corrective actions and nine opportunities for improvement: SARS packages reviewed did not appear to always have all documentation required by the SARS procedures or the documents were not up to date, NEPA records were not always submitted to the records center nor scheduled for disposition. On a positive note, procedures reviewed did not require changes and the SARS packages have shown marked improvement.
Internal Audit #12 August 16- September 17, 2004	9 0 complete 9 open/pending	Focus: Environmental Management Plans, Closed Findings, NETL Procedures and Orders, and selected elements of the Annual Site Environmental Report. Results: The Facility SARS procedure not being followed and permits are not being approved in timely; a SARS package for the Analytical Laboratory does not exist, historical and obsolete documents are not being properly marked.
Surveillance Audit #2 October 26-28, 2004	7 0 complete 7 open	Focus: Second Six Month Surveillance Audit required to maintain ISO certification. This audit checked on the status of the corrective actions from the first surveillance audit and acted to observe improvements to the EMS. Results: One opportunity for improvement related to monitoring and measurement; the auditor noted evidence of continued improvement within EMS.